

best be grasped by studying a typical village in an underdeveloped country in detail, as in Gilbert Etienne's *Studies in Indian Agriculture*. To a considerable extent it has been possible to prevent massive catastrophe up to the present by increasing the proportion of all available land under cultivation. However, just about all land that could possibly be cultivated is now under cultivation, yet the population keeps increasing. Thus, mass famine can only be averted by increasing yield per acre, but thermodynamic realities impose an upper asymptote on this figure.

2. Ehrlich notes that pandemics may be a great problem in the near future, a point not made by many experts. The fact is that plague, for example, could break out on a fearful scale in India. Precisely those conditions that allowed a resurgence of plague in India in the 1940's are found there again: large numbers of rats per person moving freely through warehouses full of American grain shipments, with inadequate efforts being made to kill the rats or board up holes. Plague can explode with such speed that it could overwhelm public health organizations.

3. Ehrlich notes that we are seriously polluting the planet. The magnitude of this problem is not well known. Smog from Los Angeles is having a serious effect on plants far to the east of the surrounding mountains, and some authorities state that it is now causing enormous losses in agricultural productivity. Emphysema death rates are among the most rapidly rising variables on earth.

In general, it appears that more familiarity with existing data would show that it is Ehrlich's critics who err, not Ehrlich.—KENNETH E. F. WATT, Department of Zoology, University of California, Davis.

Rocky Mountain Flora. By WILLIAM A. WEBER. vii + 437 pp., 346 fig. University of Colorado Press, Boulder. 1967. \$9.40.

"This book, a revision of the *Handbook of Plants of the Colorado Front Range*, culminates twenty years of intensive field and laboratory studies of the Rocky Mountain flora." It is a field guide to the "Ferns, conifers, and flowering plants of the Southern Rocky Mountains from Pikes Peak to Rocky Mountain National Park and from the plains to the Continental Divide. . . . Over 1,500 kinds of plants [1,400 species, cf. p. 2] are keyed and classified. The book is small enough to be carried in a rucksack [but not a pocket], and only a hand magnifier is needed to make the necessary examinations."

The introductory pages include a tantalizing review of why the vegetation of the Front Range is more than a "green blur." Weber points out that the flora of the Southern Rockies includes some taxa that are circumpolar; reoccur in the mountains of Central Asia; or are Tertiary relicts. The paragraphs on "Plant Geography" lead one to expect an important digest, but instead one is abandoned with a parsimonious list of examples on p. 6 and a reference to an earlier paper (Weber, W. A. 1965. Plant geography in the southern Rocky Mountains. In H. E. Wright, Jr., and D. F. Frey (editors). *The Quaternary of the United States*. Princeton Univ. Press, New Jersey.) which will not be available to many for whom this book is intended. This list, which could have kindled a lot of interest, is disappointing inasmuch as extra-territorial occurrences in the text frequently are neglected. None of the three endemics mentioned on p. 6 is clearly indicated in the text as not occurring elsewhere; one of these, *Aletes acaulis*, also occurs in New Mexico and Texas and must have been a mistake for *A. anisatus*. The selection of *Aralia racemosa* as an example of an "Eastern Woodland-prairie" cognate ought to have been explained as this species is not otherwise included in this book.

The remainder of the book is organized like its predecessor, as a continuous series of keys without the interjection of descriptions and the frills of endless measurements and literature citations. The first key leads to helpful categories such as Parasites (here including saprophytes), Aquatics, Vines, Monocots, Woody Dicots, and

Herbaceous Dicots. The families (and their genera) are arranged alphabetically within major groups, with the monocots appearing last. This is very practical for rapid finding of family and genus. The genera of Compositae are strictly alphabetical, but the grasses are arranged by tribe. Short commentaries on field observations are frequent with conscientious attention to ecology and distribution within the Front Range. Occasional synonyms are given and there are references to the second edition of the *Handbook* when there has been a change in name.

The illustrations by C. F. Yocom are an asset. The introduction and glossary use 78 of the 346 figures; thus, about 18 percent of the taxa are illustrated. The supplemental dissections or blow-ups shown beside the main drawings, which could have been helpful to beginners, are nowhere explained.

Weber has succeeded in presenting a handy and attractive two-fisted means for finding names of plants in the Front Range. The area where generally applicable is substantially greater than that of the Front Range; but both the area and the style are similar to those of the author's earlier *Handbook* and it would have seemed appropriate for this to have been the illustrated third edition without change of title. This volume distills much personal experience and is a welcome addition to the books on plants of the Rocky Mountains.—WALLACE R. ERNST, Smithsonian Institution, Washington, D. C.

Taxonomy of Flowering Plants. 2nd ed. By C. L. PORTER. ix + 472 pp., 400 plates (311 individual and sets of line drawings, 88 black & white photographs, 1 color photograph). W. H. Freeman and Company, San Francisco. 1967. \$6.75.

The second edition of this popular text, now in a more readable print, is basically the same as the first edition, with few significant changes, but with numerous small refinements. Since Mooring's discriminating review of the contents and format of the first edition (Madroño 16:171-172) could apply equally appropriately to the second edition, this brief review pertains primarily to the refinements in the second edition.

In Part I, which deals with History, Principles and Methods, a brief discussion of chemical and numerical taxonomy has been added to the chapter on Concepts of Taxa. 63 additional entries are found in the lists of references at the end of chapters; charts have been improved in format, and boldface type has been substituted for italics wherever definitions occur. Part II, which covers "Selected Orders and Families of Monocotyledons" includes several additional examples of certain taxa plus three subclass descriptions. In Part III, which deals with "Selected Orders and Families of Dicotyledons," further examples of taxa, along with keys to the families of the Ranales and the "Tribes of the Asteraceae (Compositae)," have been added. A floral diagram has been corrected, and a qualifying statement on the Apetalae has been inserted.

Throughout the book, illustrations have been renumbered in groups with parts a, b, c, etc., instead of each individual illustration being numbered consecutively; several black and white photographs have been added, and the clarity of most of the photographs has been improved.

The second edition, like the first, contains few errors, and, despite minor reservations about the author's continued use of Fabaceae, Lamiaceae, etc., instead of traditional family names, impresses this reviewer as being an excellent text, if not the best available, for introductory taxonomy courses, especially those of less than a year's duration. The clear floral diagrams and line drawings will also be found very useful in lengthier introductory courses, but instructors would probably want to supplement the material on history and principles in such instances.—KINGSLEY R. STERN, Department of Biological Sciences, Chico State College, Chico, California.